RESPONSE TO WRITTEN COMMENTS

on Tentative Order for Sausalito-Marin City Sanitary District Treatment Plant 1 East Road, Sausalito, Marin County

The Regional Water Board received written comments from the following parties on a tentative order distributed in August 2012 for public comment:

- 1. Sausalito-Marin City Sanitary District
- 2. San Francisco Baykeeper

This response to comments summarizes each comment in *italics*, followed by Regional Water Board staff response. For the full content and context of each comment, refer to the comment letters. All revisions to the tentative order are shown with <u>underline</u> for additions and <u>strikethrough</u> for deletions.

Sausalito-Marin City Sanitary District

District Comment 1: The District requests that the effluent limit for enterococcus be eliminated, or that the monitoring frequency be reduced from five times per week to twice per year. The Tentative Order included an enterococcus effluent limit to protect water contact recreation, and fecal coliform limits to protect shellfish harvesting. The District wants only fecal coliform limits protective of both water contact recreation and shellfish harvesting. If the enterococcus limit is unavoidable, the District wants the enterococcus monitoring frequency be reduced consistent with the Rodeo Sanitary District and Central Marin Sanitation Agency permits because the District's monitoring data demonstrate that violating the enterococcus limit is unlikely.

Response: We agree. Because Basin Plan Table 4-2A requires the enterococcus effluent limit, we did not revise it. However, we reduced the enterococcus monitoring frequency to four times per year, consistent with the Central Marin Sanitary Agency permit. The reduced monitoring frequency is justified because we also reduced the 90th percentile fecal coliform effluent limit to ensure that it protects both water contact recreation and shellfish harvesting. The more stringent fecal coliform limit is based on the fecal coliform objectives for water contact recreation in Basin Plan Table 3-1. We retained the median fecal coliform limit (140 MPN/100 mL), which is more stringent than the Basin Plan's fecal coliform objective for water contact recreation (geometric mean of 200 MPN/100 mL). We also retained frequent fecal coliform monitoring.

We revised Tentative Order section IV.A.3 as follows:

Fecal Coliform Bacteria: The median of the fecal coliform bacteria density of all discharge samples collected at Discharge Point No. 001 within each calendar

month shall not exceed 140 MPN/100 mL and the 90^{th} percentile shall not exceed 430 $\underline{400}$ MPN/100 mL.

We revised Fact Sheet section IV.B.2.f as follows:

Fecal Coliform Bacteria. Basin Plan Table 4-2A requires total coliform limitations for discharges into receiving waters with the shellfish harvesting beneficial use, but it allows substituting fecal coliform limitations for total coliform limitations provided that it can be demonstrated that such substitution will not result in unacceptable adverse impacts to beneficial uses. Basin Plan Table 3-1 WQOs for fecal coliform are a 5-sample median of 14 most probable number per 100 milliliters (MPN/100 mL) and a 90th percentile of 43 MPN/100 mL. Over the past permit cycle, the Discharger monitored both total coliform and fecal coliform approximately three times per week. The data indicate that the discharge would meet fecal coliform effluent limits based on the fecal coliform WQOs assuming 10:1 dilution (the limits would be a median of 140 MPN/100 mL and a 90th percentile of 430 MPN/100 mL). The actual dilution at the outfall is 84:1. The Discharger indicated that by substituting the fecal coliform limits described above for total coliform limits, the Discharger will be able to reduce the amount of chlorine it uses for disinfection. Reducing chlorine is desirable because chlorine produces toxic byproducts. However, this Order contains somewhat lower fecal coliform limits to ensure that they also protect water contact recreation. The new limits are based on Basin Plan Table 3-1 water quality objectives for water contact recreation, 90th percentile of 400 MPN/100 mL and geometric mean of 200 MPN/100 mL, without dilution credit. The previous order's median limit of 140 MPN/100 mL is retained because it is more stringent than the geometric mean water quality objective. Therefore, this permit establishes fecal coliform effluent limitations based on 10:1 dilution.

We revised MRP Table E-3 as follows:

Table E-3. Effluent Monitoring at EFF-001

Parameter	Units	Sample Type	Minimum Sampling Frequency
:			
Fecal Coliform ^[4]	MPN/100 mL	Grab	3/Week
Enterococcus ^[4]	Colonies/100 mL	Grab	5/Week 4/Year ^[5]
Chlorine, Total Residual ^[5 6]	mg/L	Continuous	Continuous
Acute Toxicity ^[67]	% Survival	C-24	1/Month
Chronic Toxicity ^[7 <u>8</u>]	TU_c	C-24	1/Year
i			

When replicate analyses are made of an enterococcus or fecal coliform sample, the reported result shall be the geometric mean of the replicate sample.

^[5] Enterococcus bacteria shall be monitored four times per year at a minimum. If the enterococcus effluent limitation is exceeded, the Discharger shall conduct 5/Month accelerated sampling for at least three consecutive months. If full compliance is demonstrated throughout the three-month period, the Discharger may return to the 4/Year sampling frequency.

District Comment 2: The District requests clarification of the requirements associated with the Effluent Characterization Study and Report. The District wants investigations to be required only when there is a "significant" increase over the previous data.

Response: We agree. Pollutant concentrations naturally vary over time, and the intent of this provision is to trigger investigations when pollutant concentrations increase significantly above historical levels or if there is an increasing trend. We revised Provision VI.C.2.a as follows:

The Discharger shall evaluate on an annual basis if concentrations of any of these priority pollutants <u>significantly</u> increase over past performance. The Discharger shall investigate the cause of <u>any such</u> increase. The investigation may include, but need not be limited to, an increase in monitoring frequency, monitoring of internal process streams, and monitoring of influent sources....

We revised Provision VI.C.2.b.ii as follows:

The Discharger shall provide a summary of the annual data evaluation and, if applicable, source investigation in the annual self-monitoring report.

District Comment 3: The District requests modifications to Table 8 (Specific Tasks to Reduce Blending) to allow greater flexibility, to remove infeasible tasks, and to align these requirements with existing practices. The District requests that Tasks 1 and 4 be less constrained so it can reduce the need for blending in the most efficient and cost-effective way. Although the District plans to do the projects identified in the Utility Analysis, those projects were proposed based on information available when the Utility Analysis was written. The District's plans could change over time so it seeks flexibility to revise its plans if necessary for reasons beyond its control, such as permitting delays or significant cost increases, or if it can meet its objectives in some other way.

The District requests that Task 3 not require it to estimate annually the reduction in blending that should result from improvements to the tributary collection system. These estimates would require monitoring data that is unavailable, and annual reductions would be small so the estimates would not be statistically robust.

The District requests that compliance dates for Tasks 1 and 4 match since it considers collection system and treatment plant improvements through an integrated process. It also requests an earlier compliance date for Task 6 to more evenly spread the tasks over time. Because the District tracks collection system and treatment plant

Effluent chlorine residual concentrations shall be monitored continuously or, at a minimum, every hour....

^[67] Acute bioassay tests shall be performed in accordance with section V.A of this MRP.

Critical life stage toxicity tests shall be performed and reported in accordance with the Chronic Toxicity Requirements specified in section V.B of this MRP.

improvements for U.S. EPA on an annual cycle beginning each October, the District expects that progress reports for Tasks 2, 3, 5, and 7 to reflect this annual cycle.

Response: We agree that flexibility in implementing Table 8 requirements is desirable, but believe the District's proposed changes are too open-ended, so we propose to include revisions that allow flexibility while assuring progress will be made on projects that help to reduce blending. We changed Tasks 1 and 4 to identify specific projects already proposed in the District's Utility Analysis. These projects are largely within the District's control and should be implemented unless substitute projects are identified (such as during actual planning and permitting) that will achieve the same outcomes. Also, we added language to Task 4 identifying a caveat for National Park Service approval because the water storage tank project will be on National Park Service land.

We revised Task 3 to remove the requirement to estimate anticipated reductions in blending volumes and numbers of blending events annually. We revised Task 8 to explicitly require this information with the next Utility Analysis.

We revised the Task 1 compliance date to match the Task 4 compliance date. We revised the Task 6 compliance date as requested to more evenly distribute the work. We revised the annual report due dates to match the due dates for U.S. EPA annual reports.

Specifically, we revised Table 8 as follows:

Table 8. Specific Tasks to Reduce Blending

	Task Compliance Date				
1 a		Compliance Date			
1.	Marin City Collection System Improvement Workplan. The Discharger shall submit a workplan for rehabilitation of prioritized gravity sewers and manholes owned and operated by the Discharger within the Marin City collection system to be performed during the permit term. The workplan improvements shall include, but not be limited to the projects identified in the Discharger's March 28, 2012, Utility Analysis, which consists of rehabilitation or replacement of approximately 12,000 feet of sewer mains in the Marin City collection system and rehabilitation of approximately 900 feet of a 24-inch gravity sewer interceptor. Another project may be substituted for one or both of these projects but only if the substitute project will achieve essentially the same intended purpose and outcome of the original project(s). The workplan shall estimate the anticipated reduction in blending volume and number of blending events to result from the improvements.	June 1, 2013 <u>January 1, 2014</u>			
2.	Progress Reports on Marin City Collection System Improvement Projects. The Discharger shall report the number and length of Marin City sewer mains, gravity sewer interceptors, and collection system pump stations repaired or replaced during the previous year. The Discharger shall also report projects to be completed in the coming year.	Annually with Annual Self- Monitoring Report due February November 1, starting February November 1, 2014 2013			
3.	Progress Reports on Tributary Collection System Agency Collection System Improvement Projects. The Discharger shall request information from tributary collection system agencies regarding the number and length of sewer mains, gravity sewer interceptors, and collection system pump stations repaired or replaced during the previous year. The Discharger shall also request information regarding	Annually with Annual Self- Monitoring Report due February November 1, starting February November 1, 2014 2013			

Task		Compliance Date
	projects to be completed in the coming year. The Discharger shall report the information it receives and estimate any anticipated reduction in blending volume and number of blending events to result from the improvements.	
4.	Treatment Plant Improvements Workplan. The Discharger shall submit a workplan for treatment plant improvement projects to reduce blending to be completed during the permit term. The workplan improvements shall include, but not be limited to, the projects identified in the Discharger's March 28, 2012, Utility Analysis, which consist of upgrading the fixed-film reactor pumps and installing a 600,000-gallon storage tank to help reduce peak flows. Completion of these projects shall be contingent upon approvals from the National Park Service, the State Lands Commission, and the Bay Conservation and Development Commission; the availability of sufficient funds; and the Discharger finding overriding considerations for any unavoidable significant impacts pursuant to the California Environmental Quality Act. Another project may be substituted for one or both of these projects but only if the substitute project will achieve essentially the same intended purpose and outcome of the original project(s). The workplan shall estimate the anticipated reduction in blending volume and number of blending events to result from the improvements.	January 1, 2014
5.	Progress Reports on Treatment-Plant Improvements. The Discharger shall report on the status of treatment pPlant improvement projects completed during the previous year. The Discharger shall also report on the status of projects to be completed in the coming year.	Annually with Annual Self- Monitoring Report due February November 1, starting February November 1, 2014 2013
6.	Private Sewer Lateral Ordinance Development. For the Marin City collection system, the Discharger shall develop proposed revisions to its sewer use ordinance to require inspection of private sewer laterals for homeowners upon change of property ownership. The Discharger shall submit the proposed revisions to its Board of Directors for consideration. The Discharger shall also encourage the tributary collection system agencies to develop similar sewer use ordinances.	June 28, 2014 June 1, 2013
7.	Private Sewer Lateral Ordinance Status. The Discharger shall report the status of proposed lateral inspection ordinances within its service area.	Annually with Annual Self- Monitoring Report due February November 1, starting February November 1, 2014 2013
8.	No Feasible Alternatives Analysis (Utility Analysis). If the Discharger seeks to continue to bypass peak wet weather flows around the secondary treatment units based on 40 CFR 122.41(m)(4)(i)(A)-(C), it shall conduct a Utility Analysis that contains all elements described in USEPA's proposed guidance NPDES Permit Requirements for Peak Wet Weather Discharges from Publicly Owned Treatment Works Treatment Plants Serving Separate Sanitary Sewer Collection Systems (December 2005, or the most recent version). In addressing these elements, the Utility Analysis shall specifically contain an alternatives analysis for blending reduction to evaluate strategies to further reduce blending through capital improvements. The analysis shall identify all feasible alternatives to reduce blending and explain why a reasonable range of infeasible alternatives are infeasible. The analysis shall account for tributary collection system agency efforts to reduce infiltration and inflow to the extent that information is available. The Discharger shall select a preferred alternative strategy based on factors including, but not limited to, the need to blend (considering the effectiveness of the collection system and treatment plant improvement projects), the alternative's foreseeable impact on	With Report of Waste Discharge due July 1, 2017

Task	Compliance Date
the need to blend (i.e., estimated effect on blending volumes and duration), and	
the alternative's estimated cost relative to the Discharger's ability to finance the	
cost. (One means to assess a community's ability to fund wet weather	
improvements is to consult USEPA's CSO Guidance for Financial Capability	
Assessment and Schedule Development, USEPA Publication Number 832-B-	
97-004.) The Utility Analysis shall include a feasible timeline for steps leading	
to implementation of the preferred alternative strategy. The primary purposes of	
the Utility Analysis are to demonstrate that there are currently no feasible	
alternatives to blending (i.e., all feasible actions that could have been	
implemented have been implemented) and to identify all feasible actions that	
can be implemented within the next permit reissuance cycle.	

District Comment 4: The District requests that it be allowed to conduct chronic toxicity screening in collaboration with other local dischargers. The District notes that we have allowed this in the past and the Sanitary District No. 5 of Marin County (Tiburon) permit allows this explicitly.

Response: We agree. In the past, we allowed the District to conduct its chronic toxicity screening in collaboration with the Sewer Agency of Southern Marin. We revised Monitoring and Reporting Program Appendix E-1, section II.A.2, as follows:

Prior to permit reissuance. Screening phase monitoring data shall be included in the NPDES permit application for reissuance. The information shall be as recent as possible, but may be based on screening phase monitoring conducted within 5 years before the permit expiration date. The Discharger shall have the option of completing the screening phase monitoring on its own or in conjunction with other local dischargers.

District Comment 5: The District requests that the effluent violation listed for February 6, 2012, be removed. The District points out that the biochemical oxygen demand violation in Fact Sheet Table F-4 is erroneous.

Response: We agree and revised Fact Sheet section II.D.1, including Table F-4, as follows:

Previous Order Violations. Nineteen Eighteen permit violations occurred during the previous order term as summarized below.

Table F-4. Numeric Effluent Limitation Violations

Date of Violation	Exceeded Parameter	Units	Effluent Limitation	Reported Concentration
2/11/2012	Weekly Average Carbonaceous Biochemical Oxygen Demand	mg/L	40	43
2/6/2012	Weekly Average Carbonaceous Biochemical Oxygen Demand	mg/L	40	4 2
11/20/2010	Instantaneous Maximum Total Residual Chlorine	mg/L	0.0	5.3
:				

The October 2007 violations were caused by equipment problems in the sludge processing units....

In addition to these violations, over the previous order cycle the Discharger had three unauthorized discharges that lead to Regional Water Board enforcement actions....

The Discharger has made the following improvements to the facility over the previous order cycle to improve its performance and safety:

:

These improvements have reduced the number of effluent violations in recent years. Only three two occurred since March 2009.

District Comment 6: The District requests that the Planned Changes section of the Fact Sheet reflect project constraints. The District notes that it can only complete the planned changes if it successfully completes its environmental review and if the National Park Service approves.

Response: We agree and revised Fact Sheet section II.E as follows:

In 2011, the Discharger began a multi-year program to repair or replace approximately 15,000 feet of gravity sewer pipelines within the Marin City collection system. This represents about 50% of the total length of gravity sewers within Marin City. The Discharger also plans to complete the following improvements to the headworks, and primary and secondary treatment systems, pending approval from the land owner, the National Park Service that include:

District Comment 7: The District requests that the blending summary section in the Fact Sheet reflect that the District complied with total suspended solids limits during blending. The District notes that the October 31, 2007, violation of the monthly average total suspended solids limit resulted from equipment problems, not blending.

Response: We agree and revised Fact Sheet section II.F as follows:

Total suspended solids concentrations were higher during blending events than when not blending. However, blending events are rare, and are typically of short duration and small volume, so the overall effects of increased pollutant loadings to San Francisco Bay are small. About 200 pounds per year of suspended solids are discharged during blending events, including the suspended solids in the fully treated effluent during blending and in the bypass flow. This compares to 50,000 pounds per year for all the Discharger's discharges. All discharges of blended effluent complied with total suspended solids effluent limitations. The effects of blending on total suspended solids concentrations are summarized in the table below. The Discharger did not monitor other pollutants when blending.

District Comment 8: The District requests that the Fact Sheet recognize that planning efforts provide estimates, not guaranteed values, for blending reductions. The District states that the reductions identified in the Utility Analysis could change.

Response: We agree and revised Fact Sheet section IV.A.3(B) as follows:

There are no feasible alternatives to the bypass. In its March 28, 2012, Utility Analysis, the Discharger completed a No Feasible Alternatives Analysis using the criteria identified in USEPA's draft guidance on NPDES Permit Requirements for Peak Wet Weather Discharges from Publicly Owned Treatment Works Treatment Plant Serving Separate Sanitary Sewer Collection Systems (December 2005). The Discharger plans to complete during this permit term upgrades to the Plant and to provide storage for peak flows. These planned upgrades are estimated to cost \$22.8 million and will are estimated to reduce the frequency of blending events to about 1.5 times per year (from the current 5 times per year), the duration to about 4.2 hours per year, and the volume to about 100,000 gallons per year....

District Comment 9: The District requests that text regarding nutrient concerns place the concerns within a regional context. The District requests that the Fact Sheet be revised to clarify that nutrient concerns are not specific to the District's discharge. It also requests deleting references to the concern as "growing."

Response: We believe the characterization of nutrients as a "growing" concern is accurate. We also believe the existing text already discusses nutrients within the regional context. Nevertheless, we revised the title of Fact Sheet section IV.C.4.c(7)(e) as follows to make the regional context more explicit:

Growing Regional Concern with Nutrients. As described above and in section IV.C.4.b, Dilution Credit, a translated Basin Plan un-ionized ammonia objective and a conservative estimate of actual initial dilution were used to calculate the total ammonia effluent limitations. In the future, the Regional Water Board may grant less dilution credit or change the ammonia limitations in other ways to address growing concerns about nutrients in the receiving water. Currently, a region-wide effort is underway to study and evaluate potential effects. This effort, which is referred to as the San Francisco Bay Nutrient Strategy, includes developing a nutrient assessment framework that can be used to calculate water quality-based effluent limits for nutrients. The Regional Water Board, through its Executive Officer, has also required wastewater dischargers, including this Discharger, to monitor nutrients, including ammonia, in their influent and effluent. This information will be used to compare nutrient loads from wastewater discharges to loads from other sources, to support modeling and evaluation of load reduction scenarios, and to determine the need for additional wastewater treatment to address nutrients.

District Comment 10: The District requests that the Fact Sheet summary of monitoring requirements include all monitoring requirements. The District

suggests revising the enterococcus monitoring frequency and adding priority pollutant monitoring.

Response: We agree and revised Fact Sheet Table F-12 as follows:

Table F-12. Monitoring Requirements Summary

Parameter	Influent INF-001	Effluent EFF-001	Effluent EFF-001b	Receiving Water
:				
Fecal Coliform		3/Week	1/Day	Support RMP
Enterococcus		5/Week 4/Year	1/Year	Support RMP
Copper		1/Month	1/Year	Support RMP
:				
Dioxin-TEQ		1/Year		Support RMP
All other priority pollutants	==	1/Year	<u></u>	Support RMP

San Francisco Baykeeper

Baykeeper Comment 1: The Regional Water Board should make all utility analyses available for public review. The Utility Analysis for this Tentative Order is neither included as an attachment to the permit, nor available on the Regional Water Board's website. Baykeeper requested a copy of the Utility Analysis, but did not receive it until the morning of the comment deadline. This practice is contrary to U.S. EPA policy.

Response: All of our supporting documents are available for public review immediately upon request. We provided a copy of the Utility Analysis less than 24 hours after Baykeeper left a telephone message requesting it. We recommend against attaching utility analyses to permits because permits already routinely exceed 100 pages, and we typically do not attach any other supporting documents. In the future, we hope to post copies of utility analyses with tentative orders on our web site for those interested. We note, however, that no adopted U.S. EPA policy requires us to attach utility analyses to tentative orders or post them on our web site. The "policy" to which Baykeeper refers is only a proposal.

Baykeeper Comment 2: The Tentative Order should require additional steps to reduce blending. Baykeeper asserts that the number of blending events rose during the previous permit reissuance cycle and the District should do more than proposed in the Tentative Order to reduce blending. It specifically suggests exploring the feasibility of increasing the District's storage capacity for excess peak flows.

Response: The tentative order (Table 8) requires specific tasks to reduce blending. Whether the apparent increase in blending incidents is part of an ongoing trend is

uncertain, particularly since inflow and infiltration into the collection system varies with the specific location, magnitude, and duration of each storm. We think the District is taking reasonable steps to reduce blending. The District sought to build in-line storage in Sausalito or upstream in the Tamalpais Community Service District service area, but it abandoned its efforts due to community opposition. Table 8, Tasks 1 and 4, require the District to implement projects listed in its Utility Analysis.

Baykeeper Comment 3: The Tentative Order should require additional monitoring during blending. Baykeeper asserts that U.S. EPA's blending policy requires monitoring all parameters with effluent limits at least once daily when blending. It notes that the Clean Water Act requires monitoring to be representative of the monitored activity. The Tentative Order contains daily effluent limitations for CBOD, pH, enterococcus, copper, zinc, and cyanide, but the Monitoring and Reporting Program only requires monitoring these pollutants once per year when blending. Baykeeper asserts that there is a higher risk of violating water quality standards when blending. Baykeeper wants daily monitoring, regardless of total suspended solids concentrations. It also wants daily monitoring for ammonia, bis(2-ethylhexyl)phthalate, chlorodibromomethane, oil and grease, and dioxin-TEQ to comply with U.S. EPA's blending policy.

Response: We disagree. The monitoring requirements for blending in Table E-4 are the same as those in Attachment G and the same as those required of all treatment plants that blend in the San Francisco Bay Region. Daily monitoring for all parameters is unnecessary because most blending events are of short duration, and many parameters are actually more dilute due to the addition of infiltration and inflow. Based on data from various dischargers within the Region, the Regional Water Board concluded when it adopted Order No. 2010-0054 (permit amendment updating Attachment G for most permits) that total suspended solids is an appropriate surrogate for other possible pollutants. When total suspended solids are below 45 mg/L, discharges were in compliance with other effluent limitations. Total suspected solids concentrations above 45 mg/L could indicate poor treatment and violations of other effluent limitations could potentially occur. Therefore, the tentative order requires samples to be retained during blending events and, if the total suspended solids trigger is exceeded, monitoring of the retained samples. Again, we note that no adopted U.S. EPA policy requires daily monitoring for all parameters with effluent limits. The "policy" to which Baykeeper refers has not been formally adopted.

Baykeeper Comment 4: The Tentative Order has a typographical error. Fact Sheet section I.C states, "On April 2, 2013, the Discharger filed a Report of Waste Discharge and submitted an application for reissuance of its WDRs and NPDES permit."

Response: We agree and revised Fact Sheet section I.C as follows:

On April 2, 2013 2012, the Discharger filed a Report of Waste Discharge and submitted an application for reissuance of its waste discharge requirements (WDRs) and NPDES permit.